IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with <u>underlining</u> and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

1.   (currently amended) An information providing system comprising:

a user terminal, comprising:

a connection state transmitting part <u>transmitted from a server in response to a session request sent to the server</u> to transmit a connection state indicating whether the user terminal exists on a session between the user terminal and ~~a~~ <u>the</u> server, which is connected to the user terminal via a network,

the server comprising:

a providing part to provide the connection state transmitting part <u>in response to the session request received from the user terminal</u> to the user terminal along with information to fulfill a request of the user terminal; and

a session management part to manage session information and to provide information to the user terminal according to the connection state of the user terminal received from the connection state transmitting part activated in the user terminal.

2.   (previously presented) The information providing system as claimed in claim 1,

wherein said session management part is comprised of a first management program, and

wherein said connection state transmitting part, which is always activated in the user terminal, comprises a terminal session establishing part for establishing a session, which is used to transmit the connection state to the server, by the first management program.

3.   (previously presented) The information providing system as claimed in claim 1,

wherein said session management part is comprised of a second management program that is activated by an execution indication from outside and comprises a connection state information management part for managing connection state information indicating a connection state of the user terminal,

wherein said connection state transmitting part activated in the user terminal comprises a

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connection state information providing part providing the execution indication and the connection state information indicating the connection state of the user terminal to the second management program, and

wherein said session management part manages a session, which is used to provide information to the user terminal, in accordance with the connection state information managed by the connection state information management part that is activated by the execution indication from said connection state transmitting part.

4. (previously presented) The information providing system as claimed in claim 1, wherein said connection state transmitting part activated in the user terminal comprises:

an event monitoring part for monitoring an event concerning request information sent from the user terminal to another system; and

an event transmitting part for transmitting said session management part of the event concerning request information, which is sent from the user terminal to another server, when the event is detected, and

wherein said session management part releases the session when the event is transmitted from the event transmitting part of the user terminal.

5. (previously presented) The information providing system as claimed in claim 1, wherein said session management part comprises a confirmation part for sending a confirmation notification in a predetermined period to check whether the user terminal is connected through the session so that said session management part manages the session in accordance with a response from-the user terminal to the confirmation notification, and

wherein said connection state transmitting part activated in the user terminal comprises a response part for sending a response notification indicating whether the user terminal is connected through the session or not, to the session management part in response to the confirmation notification sent from the session management part.

6. (previously presented) The information providing system as claimed in claim 3, wherein said session management part manages the session based on whether the connection state information is provided from the user terminal within a predetermined period or not.

7. (previously presented) A method of providing information comprising:
(a) transmitting by a user terminal to a server, via a network, a connection state indicating

whether the user terminal exists on a session between the user terminal and the server ;

(b) providing capability to perform operation (a) from the server to the user terminal along with a session identification and information to fulfill a request of the user terminal; and

(c) managing session information in the server to provide information to the user terminal according to the connection state of the user terminal.

8.   (previously presented) The method as claimed in claim 7, wherein said operation (a) activated in the user terminal comprises:

(f) monitoring an event concerning request information sent from the user terminal to another server; and

(g) notifying the server of the event concerning request information sent from the user terminal to another server when the event is detected,

wherein said operation (c) in the server releases the session when the event is notified from the operation (g) in the user terminal.

9.   (previously presented) The method as claimed in claim 7,

wherein said operation (c) comprises sending a confirmation notification in a predetermined period to check whether the user terminal is connected throughout a session, and

wherein said operation (c) manages the session in accordance with a response from the user terminal to the confirmation notification.

10.   (previously presented) The method as claimed in claim 7, wherein said operation (c) manages the session based on whether the connection state information is provided from the user terminal to the server within a predetermined period.

11.   (previously presented) The information providing apparatus of claim 1, further comprising:

a session establishing part for establishing a session between the information providing system and the user terminal when the user is authenticated in accordance with authentication information from the user terminal and the session information managed by the session management part.

12.   (previously presented) The method of claim 7, further comprising:

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establishing a session between the information providing system and the user terminal when the user is authenticated in accordance with authentication information from the user terminal and the session information managed by the session management part.

13. (previously presented) A method of managing user authentication in a server, comprising:

receiving a user ID and a password from a user and authenticating the user;

storing a session ID that corresponds to the user ID in a management table;

transmitting the session ID and a monitoring applet to the authenticated user's client;

receiving screen event information indicating whether the user's client exists on a session specified by the session ID, from the monitoring applet in the user's client; and

releasing the session ID when determined that the user's client is no longer accessing the server according to the screen event information received from the monitoring applet in the user's client.

14. (previously presented) The method of claim 13, further comprising determining that the user's client is no longer accessing the server when the screen event information indicates that the user's client has requested a screen from another server.

15. (previously presented) The method of claim 13, further comprising:

starting an existence check timer when a screen is sent to the user's client;

transmitting an existence check data to the user's client when the existence check timer expires before any screen event information is received from the monitoring applet in the user's client;

determining that the user's client is still accessing the server when an existence response data is received from the user's client in response to the existence check data; and

determining that the user's client is no longer accessing the server when no existence response data is received from the user's client in response to the existence check data.

16. (previously presented) The method of claim 13, further comprising:

starting an existence check timer when a screen is sent to the user's client;

determining that the user's client is still accessing the server when an existence report data is received from the user's client before the existence check timer expires; and

determining that the user's client is no longer accessing the server when no existence

report data is received from the user's client before the existence check timer expires.

17.   (previously presented) A machine-readable medium that provides instructions for managing user authentication in a server, which, when executed by a machine, cause the machine to perform operations comprising:

receiving a user ID and a password from a user and authenticating the user;

storing a session ID that corresponds to the user ID in a management table;

transmitting the session ID and a monitoring applet to the authenticated user's client;

receiving screen event information indicating whether the user's client exists on a session specified by the session ID, from the monitoring applet in the user's client; and

releasing the session ID when determined that the user's client is no longer accessing the server according to the screen event information received from the monitoring applet in the user's client.

18.   (previously presented) The machine-readable medium of claim 17, wherein the instructions cause the machine to perform operations further comprising determining that the user's client is no longer accessing the server when the screen event information indicates that the user's client has requested a screen from another server.

19.   (previously presented) The machine-readable medium of claim 17, wherein the instructions cause the machine to perform operations further comprising:

starting an existence check timer when a screen is sent to the user's client;

transmitting an existence check data to the user's client when the existence check timer expires before any screen event information is received from the monitoring applet in the user's client;

determining that the user's client is still accessing the server when an existence response data is received from the user's client in response to the existence check data; and

determining that the user's client is no longer accessing the server when no existence response data is received from the user's client in response to the existence check data.

20.   (previously presented) The machine-readable medium of claim 17, wherein the instructions cause the machine to perform operations further comprising:

starting an existence check timer when a screen is sent to the user's client;

determining that the user's client is still accessing the server when an existence report

data is received from the user's client before the existence check timer expires; and

determining that the user's client is no longer accessing the server when no existence report data is received from the user's client before the existence check timer expires.